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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,899	11/03/2003	William C. Kimbrell	5657	4370

7590 08/10/2006

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EXAMINER

JUSKA, CHERYL ANN

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/699,899

Applicant(s)

KIMBRELL ET AL.

Examiner

Cheryl Juska

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-39 and 41-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-39 and 41-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed July 21, 2006, has been entered. Claims 7 and 42 have been amended as requested. Claims 8 and 40 have been cancelled. Thus, the pending claims are 1-7, 9-39, and 41-51.
2. Said amendment is sufficient to withdraw the objection to claim 7 as set forth in section 4 of the last Office Action.
3. The prior art rejections set forth in sections 6-9 of the last Office Action are hereby withdrawn due to applicant's statement of co-assignment according to 35 USC 103(c) of the present application and the three Kimbrell secondary references (i.e., US 2004/0137814, 2004/0137818, and 2004/0138083).
4. However, an updated search of the prior art has produced the following new art rejection.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-7, 9-11, 13-20, 22-31, 33-39, and 41-51 are rejected under 35 USC 103(a) as being unpatentable over US 5,908,663 issued to Wang et al. in view of (a) US 2005/00962010

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issued to Fang et al., (b) US 2002/0064639, US 2004/0058072, and US issued to Rearick et al., and (c) US 6,451,717 issued to Fitzgerald et al.

7. Wang discloses a treatment for carpets comprising inorganic particles and a fluorochemical or other optional organic additive (abstract). Carpets so treated have improved soil resistance (abstract). The inorganic particles may be oxides or basic metal salts, such as silica, titanium, zirconium, or aluminum compounds (col. 3, lines 52-col. 4, line 6). Exemplary average particle sizes range from 5-100 nm (col. 4, line 50-col. 5, line 44). The various organic additives include repellent fluorochemicals, such as fluorochemical acrylates (col. 7, line 59-col. 8, line 49 and col. 9, line 48 – col. 10, line 3) and stainblockers, such as sulfonated novolac resins, acrylic resins, and styrene/maleic anhydride copolymers (col. 7, lines 1-6 and 27-58). Said organic additives may perform more than one function (col. 7, line 18). The fluorochemical repellent treatment preferably is present in an amount of at least 3% (col. 9, lines 1-16). Said treatment obviates the need for scouring (abstract), but the reference clearly teaches working examples that have been scoured (Tables 1-11 and 13). Said scoured carpet samples have spin finish oil residues ranging from about 0.01-0.26% by weight of spin finish (i.e., oil residue) (col. 11, lines 62-65 and col. 12, lines 22-23). The carpets may be made of a wide variety of carpet fibers including polypropylene, nylon, acrylic, or wool (col. 11, lines 54-57) and may have a loop or cut pile (col. 11, line 60 and col. 12, line 2). Tables 1-9 and 11-13 show ΔE values of less than 10.

Wang fails to teach the addition of a hydrophobic crosslinking agent. However, the use of crosslinking agents in the art of stain resistant treatments is known in the art. For example, Fang teaches a stain resistant treatment comprising a fluorochemical soil release agent and a

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crosslinking component or both (abstract). Said crosslinking component may be hydrophobic, such as Mitsubishi's Repearl[®] MF (abstract and sections [0020] – [0022]). Rearick teaches a crosslinkable hydrophobic water and oil repellent fluorochemical such as Repearl[®] F-35 can be applied to a fabric with the recommended crosslinking agent Repearl[®] MF, a blocked isocyanate reactive crosslinking finishing agent (Rearick 2002-'639, sections [0052], [0062], and [0142]; Rearick 2004-'072, sections [0052], [0062], and [0138]; and Rearick '887, col. 10, line 57 – col. 11, line 15, col. 13, lines 27-41, and col. 24, line 65 – col. 25, line 3). Additionally, Fitzgerald discloses highly durable oil and water repellents for textiles comprising a polymer of 70-90% perfluoroalkyl monomer, 5-25% alkyl (meth)acrylate monomer, and 0.1-2.5% of additional monomer (abstract). The polymerization of said monomers is followed by addition of an aromatic blocked isocyanate (i.e., hydrophobic crosslinking agent) (abstract). Thus, it would have been readily obvious to one skilled in the art to select a fluorochemical repellent such as the fluoroalkyl acrylate copolymer and hydrophobic crosslinking agent as disclosed by the Fang, Rearick, and Fitzgerald references for the fluorochemical repellent of Wang in order to provide a durable repellent finish. Therefore, claims 1-7, 10, 13-19, 23-31, 33-38, and 41-51 are rejected as being obvious over the cited prior art.

Since the organic additives may have more than one function and more than one organic additive can be added, it is argued that the limitation to “two distinct component types which afford stain release properties” in claim 9 is met. Additionally, since the actual chemical compounds applicant employs for the separate stain *release* component overlap with the chemical compounds employed for the fluorochemical repellent and stain resist or stain blocking component, the limitations of claims 11, 20, 22, and 39 are similarly rejected.

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8. Claim 12 is rejected under 35 USC 103(a) is rejected over the cited Wang reference in view of the cited Fang, Rearick, and Fitzgerald references as applied to claim 11 above and in further view of US 5,573,553 issued to McBride et al.

Wang, Fang, Rearick, and Fitzgerald fail to teach the addition of a bleach resistant component. However, use of said component is known in the art. For example, McBride teaches a bleach resistant component suitable for treating carpet substrates (abstract). thus, it would have been obvious to one of ordinary skill in the art to employ a bleach resistant component in the carpet treatment of Wang in order to prevent said carpet from discoloration due to bleaching. Therefore, claim 12 is rejected.

9. Claim 21 is rejected under 35 USC 103(a) is rejected over the cited Wang, Fang, Rearick, and Fitzgerald references and in further view of US 5,540,968 issued to Higgins.

Wang, Fang, Rearick, and Fitzgerald fail to explicitly teach the claimed carpet tile having a stabilizing material. However, this carpet structure is well known in the art. For example, Higgins teaches a carpet tile having a primary carpet fabric comprising pile yarns tufted into a primary backing, and adhesive layer, and a layer of a stabilizing material in contact with said adhesive layer (col. 1, lines 29-41). Therefore, it would have been readily obvious to one skilled in the art to employ the known carpet tile structure for the carpet of Wang since said structure is a well-known, dimensionally stable, and commercially successful carpet structure. Therefore, claim 21 is rejected as being obvious over the cited prior art.

10. Claim 32 is rejected under 35 USC 103(a) is rejected over the cited Wang, Fang, Rearick, and Fitzgerald references as applied to claim 22 above.

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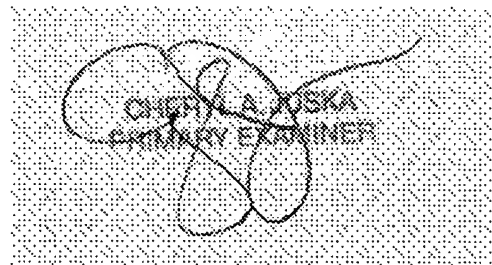
While Wang, Fang, Rearick, and Fitzgerald fail to explicitly teach the claimed polyester carpet fibers, it would have been readily obvious to one of ordinary skill in the art to employ said polyester fibers for the carpet yarns of the Wang invention. Specifically, it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use. *In re Leshin*, 125 USPQ 416. Therefore, claim 32 is rejected.

Conclusion

11. The art made of record and not relied upon is considered pertinent to applicant's disclosure.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl Juska whose telephone number is 571-272-1477. The examiner can normally be reached on Monday-Friday 10am-6pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached at 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



cj

August 7, 2006